

#### ABSTRACT OF THE DISCLOSURE

In a step-up transformer for magnetron driving in which two ferrite cores are opposed to each other with a gap G interposed therebetween, thereby forming a magnetic circuit including  
5 a middle core section, an outer core section and a coupling core section for coupling the middle core section and the outer core section, and a primary winding and a secondary winding are arranged to surround the middle core respectively, a sectional area of the middle core is increased, a number of winds in a radial direction of each of the primary winding and the secondary winding is increased and a number of winds in an axial direction is decreased, and the primary winding and the secondary winding are provided close to each other and a ratio of the sectional area of the middle core to that  
10 of the outer core is decreased to be 2 : 1 or less.  
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